

What is claimed is:

1           1.     A system for providing flexible message-based communications  
2 over a centralized messaging infrastructure, comprising:  
3           a controller to process a plurality of symmetric digital voice messages; and  
4           a voice message server to centrally transact one or more voice message  
5 sessions over a digital data network, comprising:  
6           a message queue to transiently store each such digital voice  
7 message; and  
8           a queue manager to logically interconnect a plurality of devices by  
9 routing each transiently stored digital voice message between the interconnected  
10 devices.

1           2.     A system according to Claim 1, further comprising:  
2           a session manager to manage each voice message sessions, comprising:  
3           an authentication component to process an operation by at least  
4 one such device selected from the group comprising at least one of a sign-in and a  
5 sign-out; and  
6           a message router to perform store-and-forward processing of the  
7 transiently stored digital voice messages.

1           3.     A system according to Claim 1, further comprising:  
2           a security manager to provide security between the voice message sessions  
3 by authenticating each such device into the voice message session.

1           4.     A system according to Claim 1, wherein the devices are grouped in  
2 a relationship selected from the group comprising one of a one-to-one, one-to-  
3 many and many-to-many.

1           5.     A system according to Claim 1, further comprising:  
2           a session manager to form a plurality of voice message sessions, wherein  
3 each such voice message session comprises one or more discussion groups,  
4 further comprising:

5                   a database manager to associate an identifier selected from the  
6 group comprising at least one of a user identifier and a discussion group identifier  
7 with each such digital voice message; and  
8                   a message router to provide logical participation in a plurality of  
9 such discussion group through routing the digital voice messages by identifier.

1           6.       A system according to Claim 1, further comprising:  
2           a storage device to persistently store each such digital voice message.

1           7.       A system according to Claim 1, further comprising:  
2           a voice processing component to process analog voice into the digital  
3 voice messages.

1           8.       A system according to Claim 7, further comprising:  
2           a speech recognition component to transcribe the digital voice messages  
3 using the device.

1           9.       A system according to Claim 7, further comprising:  
2           a speech recognition component to transcribe the digital voice messages  
3 using a proxy voice server interfaced to the device over a voice network.

1           10.      A system according to Claim 7, further comprising:  
2           a speech recognition component to transcribe the digital voice messages  
3 using translation logic integrated into the device.

1           11.      A system according to Claim 7, further comprising:  
2           a voice communications interface to concurrently transact voice  
3 communications over a voice network relative to the voice message session.

1           12.      A method for providing flexible message-based communications  
2 over a centralized messaging infrastructure, comprising:  
3           processing a plurality of symmetric digital voice messages; and

4 centrally transacting one or more voice message sessions over a digital  
5 data network, comprising:  
6 transiently storing each such digital voice message; and  
7 logically interconnecting a plurality of devices by routing each  
8 transiently stored digital voice message between the interconnected devices.

1 13. A method according to Claim 12, further comprising:  
2 managing each voice message sessions, comprising:  
3 processing an operation by at least one such device selected from  
4 the group comprising at least one of a sign-in and a sign-out; and  
5 performing store-and-forward processing of the transiently stored  
6 digital voice messages.

1 14. A method according to Claim 12, further comprising:  
2 providing security between the voice message sessions by authenticating  
3 each such device into the voice message session.

1 15. A method according to Claim 12, further comprising:  
2 grouping the devices in a relationship selected from the group comprising  
3 one of a one-to-one, one-to-many and many-to-many.

1 16. A method according to Claim 12, further comprising:  
2 forming a plurality of voice message sessions, wherein each such voice  
3 message session comprises one or more discussion groups, further comprising:  
4 associating an identifier selected from the group comprising at  
5 least one of a user identifier and a discussion group identifier with each such  
6 digital voice message; and  
7 providing logical participation in a plurality of such discussion  
8 group through routing the digital voice messages by identifier.

1 17. A method according to Claim 12, further comprising:  
2 persistently storing each such digital voice message.

1           18.    A method according to Claim 12, further comprising:  
2           processing analog voice into the digital voice messages.

1           19.    A method according to Claim 18, further comprising:  
2           converting analog voice signals into the digital voice messages using the  
3           device.

1           20.    A method according to Claim 18, further comprising:  
2           transcribing analog voice signals into the digital voice messages using a  
3           proxy voice server interfaced to the device over a voice network.

1           21.    A method according to Claim 18, further comprising:  
2           transcribing analog voice signals into the digital voice messages using  
3           translation logic integrated into the device.

1           22.    A method according to Claim 18, further comprising:  
2           concurrently transacting voice communications over a voice network  
3           relative to the voice message session.

1           23.    A computer-readable storage medium holding code for performing  
2           the method according to Claim 12.

1           24.    An apparatus for providing flexible message-based  
2           communications over a centralized messaging infrastructure, comprising:  
3           means for processing a plurality of symmetric digital voice messages; and  
4           means for centrally transacting one or more voice message sessions over a  
5           digital data network, comprising:  
6                    means for transiently storing each such digital voice message; and  
7                    means for logically interconnecting a plurality of devices by means  
8           for routing each transiently stored digital voice message between the  
9           interconnected devices.

1           25.    A system for providing flexible message-based communications  
2 with personal communication devices over a centralized messaging infrastructure,  
3 comprising:  
4           a plurality of personal communication devices to originate digital voice  
5 messages comprising digitized voice;  
6           a voice message server to communicatively interface to the one or more  
7 personal communication devices over a digital data network; and  
8           a queue manager to process the digital voice messages, comprising:  
9                a receiver to receive each digital voice message from at least one  
10 such personal communication device;  
11               a message queue to transiently store the digital voice message; and  
12               a sender to send the digital voice message to at least one such  
13 personal communication device identified in the digital voice message.

1           26.    A system according to Claim 25, further comprising:  
2           a database manager to interface to a plurality of databases, comprising:  
3                a user and discussion group database to store session information;  
4                a personal information database to store personal information;  
5           a control module to provide an interface authenticating at least one  
6 personal communication device against the personal information; and  
7           a queue manager to stage each such digital voice message and to forward  
8 the digital voice message based on the session information.

9           27.    A system according to Claim 25, further comprising:  
10           a proxy message server to communicatively interface a personal  
11 communication device with the voice message server.

12           28.    A system according to Claim 25, further comprising:  
13           a cellular telephone to integrate with at least one such personal  
14 communication device.

1           29.    A system according to Claim 25, wherein the one or more personal  
2 communication devices further comprise:

3               a voice message module to digitize the voice messages;  
4               a message storage module to store transient voice messages, comprising:  
5                     a buffer to assemble outgoing voice messages;  
6                     a message queue to transitorily store the outgoing voice messages;  
7    and  
8               a message store to persistently store saved voice messages.

1           30.    A method for providing flexible message-based communications  
2 with personal communication devices over a centralized messaging infrastructure,  
3 comprising:

4               originating digital voice messages comprising digitized voice through a  
5 plurality of personal communication devices;  
6               communicatively interfacing the one or more personal communication  
7 devices over a digital data network; and  
8               processing the digital voice messages, comprising:  
9                     receiving each digital voice message from at least one such  
10 personal communication device;  
11                    transiently storing the digital voice message; and  
12                    sending the digital voice message to at least one such personal  
13 communication device identified in the digital voice message.

1           31.    A method according to Claim 30, further comprising:  
2               interfacing to a plurality of databases, comprising:  
3                     maintaining a user and discussion group database to store session  
4 information;  
5                     maintaining a personal information database to store personal  
6 information;

7           providing an interface authenticating at least one personal communication  
8 device against the personal information; and  
9           staging each such digital voice message and to forward the digital voice  
10 message based on the session information.

11           32.    A method according to Claim 30, further comprising:  
12           communicatively interfacing a personal communication device with the  
13 voice message server through a proxy message server.

14           33.    A method according to Claim 30, further comprising:  
15           integrating a cellular telephone with at least one such personal  
16 communication device.

1           34.    A method according to Claim 30, wherein the one or more  
2 personal communication devices further comprise:  
3           digitizing the voice messages;  
4           storing transient voice messages, comprising:  
5           assembling outgoing voice messages;  
6           transitorily storing the outgoing voice messages; and  
7           persistently storing saved voice messages.

1           35.    A computer-readable storage medium holding code for performing  
2 the method according to Claim 30.

1           36.    An apparatus for providing flexible message-based  
2 communications with personal communication devices over a centralized  
3 messaging infrastructure, comprising:  
4           means for originating digital voice messages comprising digitized voice  
5 through a plurality of personal communication devices;  
6           means for communicatively interfacing the one or more personal  
7 communication devices over a digital data network; and  
8           means for processing the digital voice messages, comprising:

9 means for receiving each digital voice message from at least one  
10 such personal communication device;  
11 means for transiently storing the digital voice message; and  
12 means for sending the digital voice message to at least one such  
13 personal communication device identified in the digital voice message.